A REDESCRIPTION OF THE HOLOTYPE MALE OF AEDES (STEGOMYIA) TONGAE EDWARDS WITH A NOTE ON TWO TOPOTYPIC FEMALES

(DIPTERA: CULICIDAE)

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A REDESCRIPTION OF THE HOLOTYPE MALE OF AEDES (STEGOMYIA) TONGAE EDWARDS WITH A NOTE ON TWO TOPOTYPIC FEMALES

(DIPTERA: CULICIDAE)[1,2]

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ABSTRACT—The holotype male of *Aedes* (*Stegomyia*) *tongae* Edwards from Ha'apai, Tonga, South Pacific is redescribed and illustrated. Two topotypic females of this species of Buxton & Hopkins' expedition to Ha'apai, Tonga, South Pacific, 1925 are also described here.

The name *Aedes tongae* Edwards 1926 has caused much confusion. At least two species were being mistaken for *tongae* Edwards as reported by Belkin (1962:476) and Ramalingam and Belkin (1965:2).

According to Ramalingam and Belkin (1965:2–3), the description and figures by Belkin (1962:475–476, 349–350) for "*tongae*" are actually those of another species which they named *tabu*. Thus, no detailed description and figures of true *tongae* are available at the present.

Through the kindness of Dr. P. F. Mattingly, I have had the opportunity to examine the holotype male of *tongae* Edwards and the two females which bear the same data as the holotype. I take advantage of this opportunity to give a full description of this holotype male and the two topotypic females so that the identity of Edwards' *tongae* should no longer remain in doubt.

Species of the *scutellaris* group in the Tonga area are being investigated further under a SEAMP-WHO project and the full results will be published later. Due to the highly variable nature of the group in both adult and immature characteristics, a large number of progeny rearings from many different localities are required to provide sound criteria for establishing the true identity of the species.

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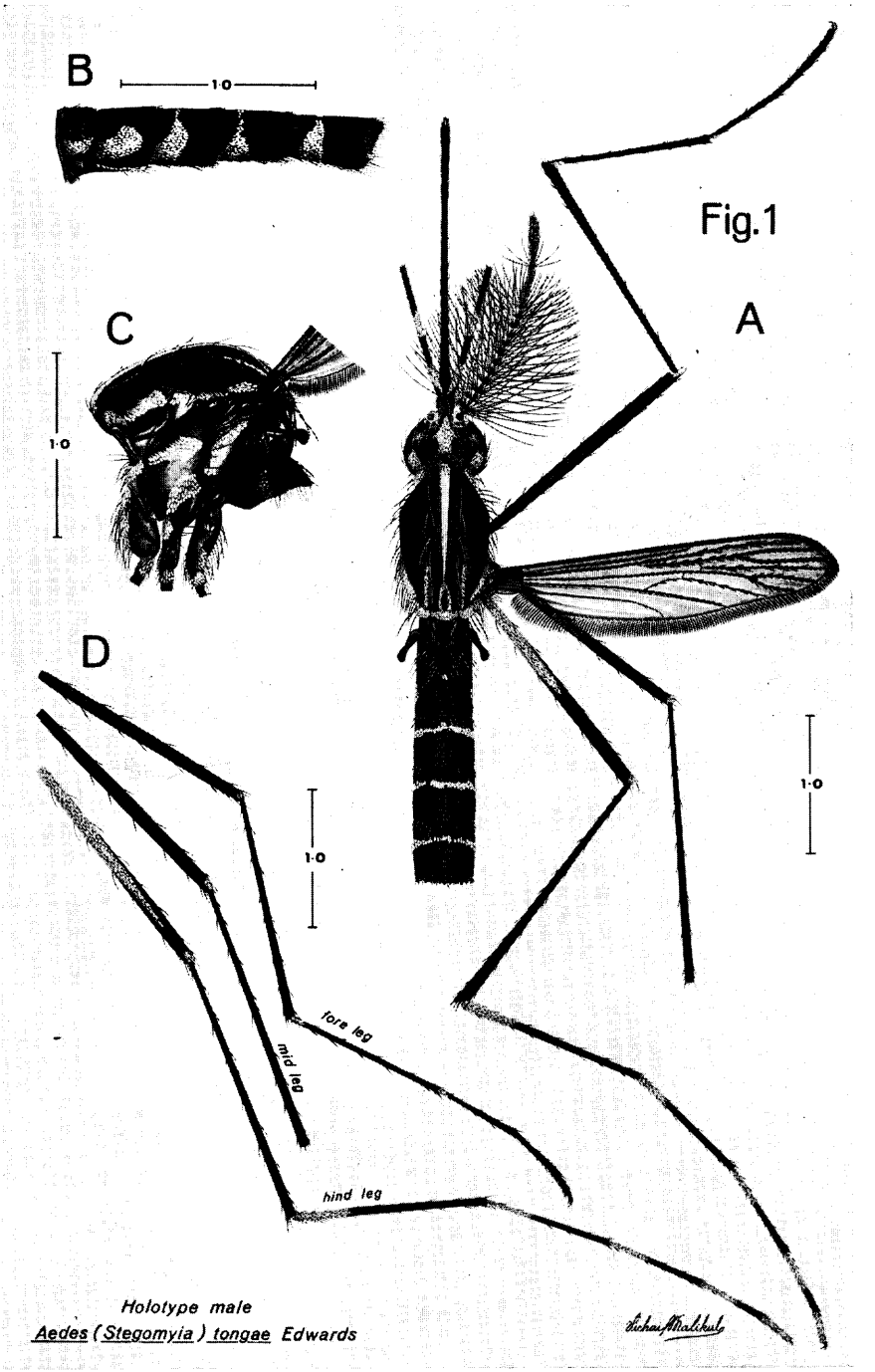
Fig. 1. *Aedes* (*Stegomyia*) *tongae* Edwards, holotype ♂: A, dorsal aspect; B, lateral aspect of abdomen; C, lateral aspect of thorax; D, anterior surface of legs.


B
1·0
Fig.1
C
A
1·0
D
1·0
1·0
fore leg
mid leg
hind leg
Holotype male
Aedes (Stegomyia) tongae Edwards

Aedes (Stegomyia) tongae Edwards

(Figs. 1, 2)

Aedes (*Stegomyia*) *variegatus* var. *tongae* Edwards, 1926, Bull. Ent. Res. 17:103 (♂ *, ♀). Type locality: Ha'apai, Tonga Islands.

Type male, in fair condition (Pres. by Imp. Bur. Ent. 1926. 62) with associated terminalia on a slide, Ha'apai, Tonga, South Pacific, 26–II–1925 (P. A. Buxton and G. H. Hopkins collectors). Deposited in the British Museum (Natural History), London.

Head.—Proboscis dark scaled, with a few pale scales on ventral side, slightly longer than fore femur; palpus dark, with a white basal band on segments 2, 3; rest of palpus missing; antenna plumose, shorter than proboscis; clypeus bare; torus covered with white scales except on dorsal side; decumbent scales of vertex all broad and flat; erect forked scales dark, not numerous, restricted to occiput; vertex with a median stripe of broad white scales, with broad dark ones on each side interrupted by a lateral stripe of broad white scales followed by a patch of white broad ones ventrally. *Thorax.* Scutum with narrow dark scales and a prominent median longitudinal stripe of similar white ones, median stripe narrows slightly posteriorly and forks at beginning of prescutellar space, prescutellar line with yellowish scales; posterior dorsocentral yellowish lines do not reach to middle of scutum; supraalar line of broad white scales present; acrostichal bristles absent; dorsocentral bristles present; scutellum with broad white scales on all lobes and with a few broad dark ones at apex of mid lobe; anterior pronotum with broad white scales; posterior pronotum with narrow dark scales on upper portion and with broad white scales on lower portion forming a white stripe instead of a white patch; paratergite with broad white scales; postspiracular area without scales; subspiracular area without scales; patches of broad white scales on propleuron, on upper and lower sternopleuron and on upper and lower mesepimeron; lower mesepimeral scale patch of medium size and narrowly connected to upper mesepimeral scale patch; lower mesepimeron without bristles; metameron bare. *Wing.* With dark scales on all veins except for a minute basal spot of white scales on costa; first forked cell 1.5 times as long as its stem. *Halter.* With dark scales. *Leg.* Coxae with patches of white scales; knee-spots present on all femora; fore and mid femora dark anteriorly, paler posteriorly; hind femur anteriorly with a broad white longitudinal stripe which widens towards base and is separated from apical white knee-spot; fore and mid tibiae dark anteriorly, paler posteriorly; hind tibia dark; fore tarsus with basal white bands on tarsomeres 1, 2; mid tarsus missing; hind tarsus with basal white bands on tarsomeres 1–4, ratio of length of white band to total length of tarsomere is 1/3, 1/3, 2/5 and 1/2; tarsomere 5 all white; fore leg with tarsal claws unequal, larger one toothed, smaller one simple; hind leg with tarsal claws equal, simple. *Abdomen.* Abdominal segment I with white scales on laterotergite; tergum II with a small basal median spot and with lateral white spots; terga III–V each with a complete sub-basal pale yellowish band connected to lateral white spots. *Terminalia.* Basimere 3.5 times as long as wide; its scales restricted to dorsolateral, lateral and ventral areas; with a patch of hairs on the basomesal area of dorsal surface; mesal surface membranous; claspette simple, slender, sternal and tergal sides parallel, rounded apically, with 6 modified setae in a row on apical 1/5 of sternal side; lateral surface with hairs extending basad

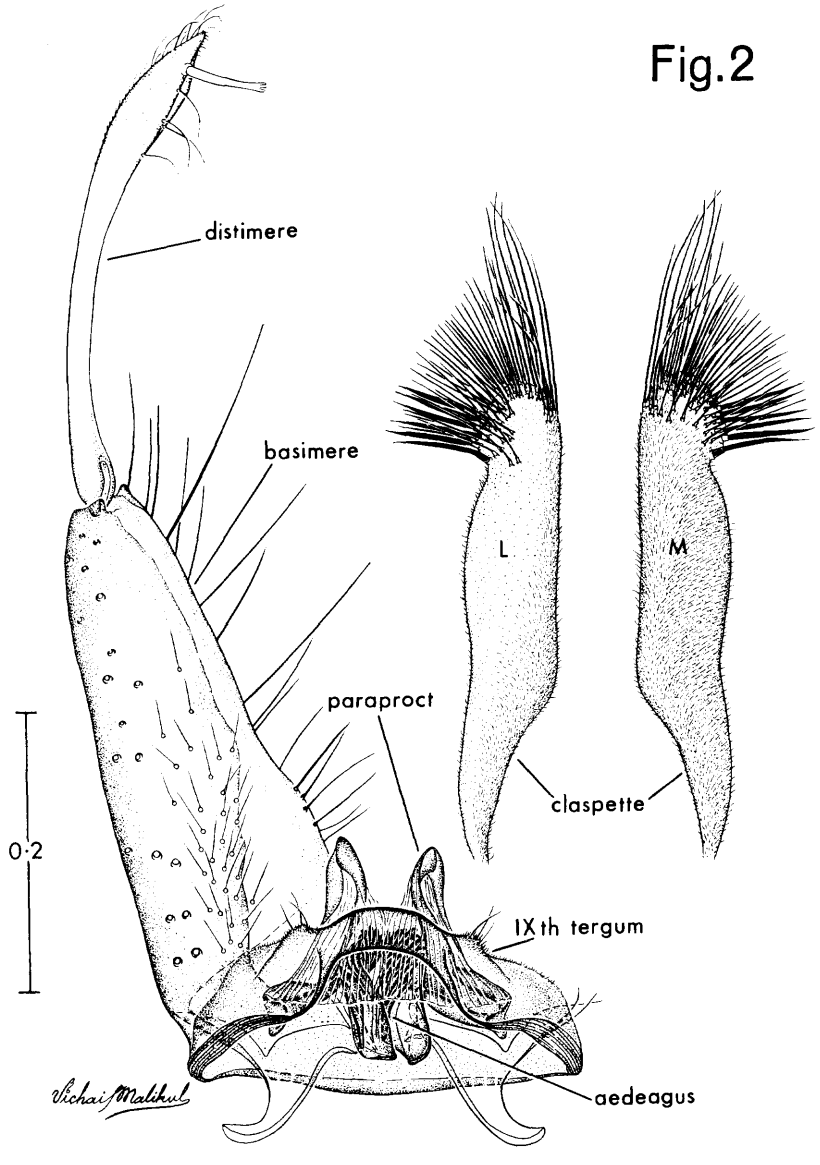


Fig. 2. *Aedes* (*Stegomyia*) *tongae* Edwards, holotype ♂, tergal aspect of terminalia with claspette enlarged.

to about level of modified setae; apex tergally with hairs about ½ as long as entire lobe length; distimere simple, elongate, as long as basimere, slightly swollen near tip; with a spiniform process and a few hairs near apex; aedeagus with a distinct sclerotized lateral toothed plate on each side; paraprocts without teeth; cercal setae absent; ninth tergum with middle rounded and with a hairy lobe on each side.

FEMALE. Based on 2 topotypic females, with same data as type male. Deposited in British Museum. Essentially as in male, differing in the following respects: palpus ⅕ of proboscis, with white scales on apical half. Wing with first forked cell about 2 times as long as its stem. Mid tarsus which is absent in the male, with basal white bands on tarsomeres 1, 2; fore and mid legs with tarsal claws equal, simple. Abdominal tergum II dark dorsally with lateral white spots only; terga III–VI each with a complete or incomplete sub-basal pale yellowish band and with lateral white spots which are turned dorsomesally and connected to sub-basal pale yellowish bands; tergum VII with lateral white spots only or with a small basal median spot as well; segment VIII completely retracted.

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